

Remarks

By this amendment, claim 50 remains cancelled and claims 33-37 and 56-62 are withdrawn. New claims 63-65 are presented for consideration. No new matter has been presented. Claims 38-49, 51-55, and 63-65 will be pending. Reconsideration in view of the following remarks is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 38-49 and 51-55 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 2,971,295 to Reynolds (Reynolds). This rejection is respectfully traversed.

Independent claims 38, 48, and 52 recite “prestressed tendons.” Reynolds does not disclose prestressed tendons. Further, it would not have been obvious in view of Reynolds to provide prestressed tendons. For example, “prestressed tendons” are described in the Specification as “wire ropes,” wherein “tension [is applied] to the wire ropes during the casting and hardening of the panel.” (Specification, page 11, line 11.) By contrast, Reynolds teaches “stressing rods” and “placing the rods under tension after the concrete has set for a day or more so as to properly stress the units.” (Reynolds, column 3, lines 42-44.) Tensioning rods in such a manner does not teach “prestressed tendons,” as recited in claims 38-49 and 51-55.

Furthermore, Reynolds does not teach how to obtain nor does Reynolds inherently yield the advantages of prestressed tendons. For example, prestressed tendons develop a “secure bond between the concrete and the rope” such that thin concrete panels (i.e., in most embodiments, panels having a maximum thickness of approximately 1.5 inches) can be produced. (Specification, page 4, lines 22-23.) However, Reynolds teaches rods that are movable after the concrete sets and stress is transferred to the concrete through a nut and washer. (Reynolds, column 3, lines 41-42.) Applying such teachings to a thin concrete panel as described above would likely result in warping or curling of the panel.

Finally, Reynolds states that a method in which “stressing rods . . . [are] pretensioned . . . when the concrete sets” is “usually less desirable than tensioning the rods after the concrete has set.” Therefore, Reynolds does not teach or suggest prestressed tendons and actually teaches away from prestressed tendons.

Because Reynolds does not teach "prestressed tendons" as recited in claims 38-49 and 51-55, nor does Reynolds disclose using tendons of the same diameter, pretensioning the tendons to substantially the same tension, or positioning the tendons as described in the respective claims, claims 38-49 and 51-55 would not have been obvious to one having ordinary skill in the art in view of Reynolds. Accordingly, claims 38-49 and 51-55 are patentable in view of Reynolds, and the rejection should be withdrawn.

New claim 63 recites "a concrete panel as set forth in claim 38, wherein said first and second set of tendons have surfaces that are bonded with the concrete." Support for claim 63 is found in the Specification, for example, at page 7, lines 15-16. Support for new claims 64-65 is found in the Specification at page 6, line 17, to page 7, line 12, for example. No new matter has been presented.

New claims 63-65 depend from allowable independent claims and are therefore allowable for at least the reasons recited above with regard to respective independent claims

Conclusion

Based on the foregoing, Applicant respectfully submits that the claims are directed to allowable subject matter and that the application is in condition for allowance. Should the examiner believe that anything further is required to place this application in better condition for allowance, the Examiner is requested to telephone Applicant's representative.

Respectfully submitted,

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